

What is claimed is:

1. A method of reducing the pH of a servicing fluid comprising the steps of:
providing a crosslinked, viscous servicing fluid comprising an acid-releasing degradable material;
allowing the acid-releasing degradable material to produce an acid; and
allowing the servicing fluid's pH to reduce.
2. The method of claim 1 wherein the servicing fluid comprises a fracturing fluid or a gravel packing transport fluid.
3. The method of claim 1 wherein the servicing fluid is crosslinked with a crosslinker comprising boric acid, disodium octaborate tetrahydrate, sodium diborate and pentaborates, ulexite, colemanite, zirconium lactate, zirconium lactate triethanolamine, zirconium carbonate, zirconium acetylacetonate, and zirconium diisopropylamine lactate, titanium ammonium lactate, titanium triethanolamine, titanium acetylacetonate, aluminum citrate or aluminum lactate.
4. The method of claim 1 wherein the servicing fluid de-crosslinks when its pH is lowered below about 9.
5. The method of claim 1 wherein the acid-releasing degradable material comprises a lactide, poly (lactic acid) or a blend thereof.
6. The method of claim 1 wherein the acid-releasing degradable material comprises a lactide, a poly(lactide); a glycolide; a poly(glycolide); a substantially water insoluble anhydride; a poly(anhydride), a substituted poly (lactide) wherein the substituent is selected from the group consisting of hydrogen, alkyl, aryl, alkylaryl, acetyl, heteratoms and mixtures thereof or a combination thereof.
7. The method of claim 1 wherein the acid-releasing degradable material further comprises a solvent.
8. The method of claim 7 wherein the solvent is acetone, propylene carbonate, dipropylglycolmethylether, methylene chloride, isopropyl alcohol, or combinations thereof.

9. A method of fracturing a subterranean formation comprising the steps of
providing a crosslinked, viscous fracturing fluid comprising an acid-releasing
degradable material;
placing the fracturing fluid into a subterranean formation at a pressure sufficient
to create at least one fracture;
allowing the acid-releasing degradable material to produce an acid;
allowing the pH and viscosity of the fracturing fluid to reduce.
10. The method of claim 9 wherein the fracturing fluid is crosslinked with a
crosslinker comprising boric acid, disodium octaborate tetrahydrate, sodium diborate and
pentaborates, ulexite, colemanite, zirconium lactate, zirconium lactate triethanolamine,
zirconium carbonate, zirconium acetylacetonate, and zirconium diisopropylamine lactate,
titanium ammonium lactate, titanium triethanolamine, titanium acetylacetonate, aluminum
citrate or aluminum lactate.
11. The method of claim 9 wherein the fracturing fluid de-crosslinks when its pH is
lowered below about 9.
12. The method of claim 9 wherein the acid-releasing degradable material comprises
a lactide, poly (lactic acid) or a blend thereof.
13. The method of claim 9 wherein the acid-releasing degradable material comprises
a lactide, a poly(lactide); a glycolide; a poly(glycolide); a substantially water insoluble
anhydride; a poly(anhydride), a substituted poly (lactide) wherein the substituent is selected from
the group consisting of hydrogen, alkyl, aryl, alkylaryl, acetyl, heteratoms and mixtures thereof
or a combination thereof.
14. The method of claim 9 wherein the acid-releasing degradable material further
comprises a solvent.
15. The method of claim 14 wherein the solvent is acetone, propylene carbonate,
dipropylglycolmethylether, methylene chloride, isopropyl alcohol, or combinations thereof.

16. A method of creating a gravel pack in a well bore comprising the steps of
providing a crosslinked, viscous gravel transport fluid comprising gravel and an acid-releasing degradable material;
placing the gravel transport fluid into a portion of a well bore so as to create a gravel pack;
allowing the acid-releasing degradable material to produce an acid;
allowing the pH and viscosity of the gravel transport fluid to reduce.
17. The method of claim 16 wherein the gravel transport fluid is crosslinked with a crosslinker comprising boric acid, disodium octaborate tetrahydrate, sodium diborate and pentaborates, ulexite, colemanite, zirconium lactate, zirconium lactate triethanolamine, zirconium carbonate, zirconium acetylacetonate, and zirconium diisopropylamine lactate, titanium ammonium lactate, titanium triethanolamine, titanium acetylacetonate, aluminum citrate or aluminum lactate.
18. The method of claim 16 wherein the gravel transport fluid de-crosslinks when its pH is lowered below about 9.
19. The method of claim 16 wherein the acid-releasing degradable material comprises a lactide, poly (lactic acid) or a blend thereof.
20. The method of claim 16 wherein the acid-releasing degradable material comprises a lactide, a poly(lactide); a glycolide; a poly(glycolide); a substantially water insoluble anhydride; a poly(anhydride), a substituted poly (lactide) wherein the substituent is selected from the group consisting of hydrogen, alkyl, aryl, alkylaryl, acetyl, heteratoms and mixtures thereof or a combination thereof.
21. The method of claim 16 wherein the acid-releasing degradable material further comprises a solvent.
22. The method of claim 21 wherein the solvent is acetone, propylene carbonate, dipropylglycolmethylether, methylene chloride, isopropyl alcohol, or combinations thereof.

23. A servicing fluid composition comprising a crosslinked, viscous fluid and an acid-releasing degradable material.

24. The servicing fluid of claim 23 wherein the servicing fluid comprises a fracturing fluid or a gravel packing transport fluid.

25. The servicing fluid composition 23 wherein the servicing fluid is crosslinked with a crosslinker comprising boric acid, disodium octaborate tetrahydrate, sodium diborate and pentaborates, ulexite, colemanite, zirconium lactate, zirconium lactate triethanolamine, zirconium carbonate, zirconium acetylacetonate, and zirconium diisopropylamine lactate, titanium ammonium lactate, titanium triethanolamine, titanium acetylacetonate, aluminum citrate or aluminum lactate.

26. The servicing fluid claim 23 wherein the servicing fluid de-crosslinks when its pH is lowered below about 9.

27. The method of claim 23 wherein the acid-releasing degradable material comprises a lactide, poly (lactic acid) or a blend thereof.

28. The method of claim 23 wherein the acid-releasing degradable material comprises a lactide, a poly(lactide); a glycolide; a poly(glycolide); a substantially water insoluble anhydride; a poly(anhydride), a substituted poly (lactide) wherein the substituent is selected from the group consisting of hydrogen, alkyl, aryl, alkylaryl, acetyl, heteratoms and mixtures thereof or a combination thereof.

29. The method of claim 23 wherein the acid-releasing degradable material further comprises a solvent.

30. The method of claim 29 wherein the solvent is acetone, propylene carbonate, dipropylglycolmethylether, methylene chloride, isopropyl alcohol, or combinations thereof.